1. (Cancelled) A test tip device for measuring an analyte in a sample comprising:

   a piece of optical fiber with two ends; a reagent pad containing all the necessary chemicals and enzymes for a specified analysis; said reagent pad being mounted to one end of said optical fiber; a detection device comprising: (a) a light emitting source; (b) a housing for engaging the other end of said fiber to said light source; (c) a photo detector to receive light reflected off the reagent pad end of said fiber; (d) a processor to convert the light signal to the analyte concentration, and (e) a display to display the test results.

2. (Cancelled) The device of claim 1, wherein the test tip is disposable.

3. (Cancelled) The device of claim 1, wherein the reagent pad is a membrane impregnated with dry chemicals and enzymes.

4. (Cancelled) The device of claim 1, wherein said reagent pad is a cast polymer which contains all the required chemicals and enzymes for a specified analysis.

5. (Cancelled) The device of claim 1, wherein the reagent pad membrane is mounted to the end of said optical fiber by an adhesive.

6. (Cancelled) The device of claim 1, wherein the reagent pad membrane is mounted to the end of said optical fiber by ultrasonic welding.

7. (Cancelled) The device of claim 1, wherein said optical fiber is made of glass/glass, or plastic/plastic, or glass/plastic.

8. (Cancelled) A tubular test tip device for measuring an analyte in a sample comprising: a piece of micro tubing with two ends; a reagent pad containing all the necessary chemicals and enzymes for a specified analysis; said reagent pad being mounted to one end of said tubing; a detection device comprising: (a) a light emitting source; (b) a fiber optic probe connected to the said light source, (c) a photo detector to receive light reflected off the reagent pad end of said tip; (d) a processor to convert the light signal to the analyte concentration, and (e) a display to display the test results.

9. (Cancelled) The device of claim 8, wherein the test tip is disposable.

10. (Cancelled) The device of claim 8, wherein the reagent pad is a membrane impregnated with dry chemicals and enzymes.

11. (Cancelled) The device of claim 8, wherein the reagent pad membrane is mounted to the end of said optical tubular tip by an adhesive.

12. (Cancelled) The device of claim 8, wherein the reagent pad membrane is mounted to the end of said tubular tip by ultrasonic welding.

13. (Cancelled) The device of claim 8, wherein said reagent pad is a cast polymer which contains all the required chemicals and enzymes for a specified analysis.

14. (Cancelled) The device of claim 8, wherein said fiber optic probe is made of glass/glass, or plastic/plastic, or glass/plastic.

15. (Cancelled) A test tip device for measuring an analyte in a sample for minimally invasive diagnostic use comprising: an elongated, non-air, light conducting medium between the light emitting/detecting sources and the reagent pad; said light conducting medium being a piece of solid, micro optical fiber with two equal ends; a reagent pad containing all the necessary chemicals and enzymes for a specified analysis; said

reagent pad being mounted to one end of said optical fiber; a detection device comprising: (a) a light emitting source; (b) a housing for engaging the other end of said fiber to said light source; (c) a photo detector to receive light reflected off the reagent pad end of said fiber; (d) a processor to convert the light signal to the analyte concentration, and (e) a display to display the test results.

16. (Cancelled) The device of claim 15, wherein the test tip is disposable.

17. (Cancelled) The device of claim 15, wherein the reagent pad is a membrane impregnated with dry chemicals and enzymes.

18. (Cancelled) The device of claim 15, wherein said reagent pad is a cast polymer which contains all the required chemicals and enzymes for a specified analysis.

19. (Cancelled) The device of claim 15, wherein the reagent pad membrane is mounted to the end of said optical fiber by an adhesive.

20. (Cancelled) The device of claim 15, wherein said optical fiber is 0.1-2.0 mm in diameter and 5-50 mm in length, and made of glass/glass, or plastic/plastic, or glass/plastic.

21. (Cancelled) A tubular test tip device for measuring an analyte in a sample comprising: an elongated piece of micro plastic tubing with two ends of equal size, 0.1-2.0 mm in diameter and 5-50 mm in length; a reagent pad containing all the necessary chemicals and enzymes for a specified analysis; said reagent pad being mounted to one end of said tubing; a detection device comprising: (a) a light emitting source; (b) an elongated, non-air, fiber optic probe with two ends of equal size to transmit light, (c) a photo detector to receive light transmitted back by said fiber optic probe from reflection off the reagent pad end of said tip; (d) a processor to convert the light signal to the analyte concentration, and (e) a display to display the test results.

22. (Cancelled) The device of claim 21, wherein the test tip is disposable.

23. (Cancelled) The device of claim 21, wherein the reagent pad is a membrane impregnated with dry chemicals and enzymes.

24. (Cancelled) The device of claim 21, wherein the reagent pad membrane is mounted to the end of said optical tubular tip by an adhesive.

25. (Cancelled) The device of claim 21, wherein said reagent pad is a cast polymer which contains all the required chemicals and enzymes for a specified analysis.

26. (Cancelled) The device of claim 21, wherein said fiber optic probe is made of glass/glass, or plastic/plastic, or glass/plastic.

27. (New) A test tip device for measuring an analyte in a sample for minimally invasive diagnostic use comprising: an elongated, non-air, light conducting medium between the light emitting/detecting sources and the reagent pad; said light conducting medium being a piece of solid, micro optical fiber with two equal ends; a reagent pad containing all the necessary chemicals and enzymes for a specified analysis; said reagent pad being mounted to one end of said optical fiber; a detection device comprising: (a) a light emitting source; (b) a housing for engaging the other end of said fiber to said light source; (c) a photo detector to receive light reflected off the reagent pad end of said fiber; (d) a processor to convert the light signal to the analyte concentration, and (e) a display to display the test results.

28. (New) The device of claim 27, wherein the test tip is disposable.

29. (New) The device of claim 27, wherein the reagent pad is a membrane impregnated with dry chemicals and enzymes.

30. (New) The device of claim 27, wherein said reagent pad is a cast membrane which contains all the required chemicals and enzymes for a specified analysis.

31. (New) The device of claim 27, wherein said optical fiber is made of glass/glass, or plastic/plastic, or glass/plastic.

32. (New) A tubular test tip device for measuring an analyte in a sample comprising: an elongated piece of micro plastic tubing with two ends of equal size; a reagent pad containing all the necessary chemicals and enzymes for a specified analysis; said reagent pad being mounted to one end of said tubing; a detection device comprising: (a) a light emitting source; (b) an elongated, non-air, fiber optic probe with two ends of equal size to transmit light, (c) a photo detector to receive light transmitted back by said fiber optic probe from reflection off the reagent pad end of said tip; (d) a processor to convert the light signal to the analyte concentration, and (e) a display to display the test results.

33. (New) The device of claim 32, wherein the test tip is disposable.

34. (New) The device of claim 32, wherein the reagent pad is a membrane impregnated with dry chemicals and enzymes.